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## Patent Abstracts of Japan

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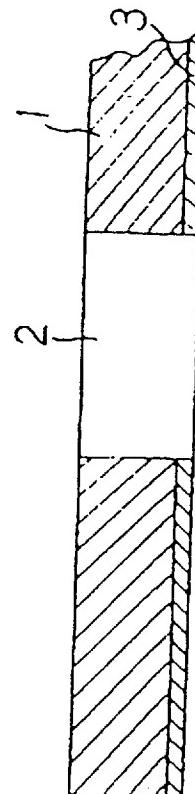
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APPLICATION NUMBER : 55103703

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INVENTOR : SAGI KUNIO;

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TITLE : METHOD OF MANUFACTURING  
SLIDING SURFACE



ABSTRACT : PURPOSE: To manufacture a sliding surface which has stable quality, high mechanical strength, cavitation resistance, etc. and slides on a sliding surface made of ferrous metal, by cast-bonding lead bronze on a copper alloy later.

CONSTITUTION: Lead bronze 3 is cast-bonded on a valve plate 1 made of copper alloy to manufacture a sliding surface which slides on a sliding surface made of ferrous metal such as steel and cast iron. Since the main structure of the copper alloy layer 1 and that of the lead bronze 3 cast-bonded thereon are the same copper structure, their affinity is high, namely, they are well cast-bonded on each other. Therefore, the sliding surface of stable quality is obtained. The numeral "2" in the drawing denotes a suction and discharge port. Since the copper alloy later 1 is made of beryllium copper, aluminium bronze, high tension brass, Silzin bronze or the like, its mechanical strength is high. Since the lead bronze 3 is cast-bonded on the copper alloy later 1, the strength of bonding of grains is so high that the sliding surface is provided with resistance to cavitation and erosion.

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